



MORBIDITY AND MORTALITY WEEKLY REPORT

- 429 Assessment of Sexually Transmitted Diseases Services in City and County Jails — United States, 1997
- **432** Syphilis Screening Among Women Arrestees at a Cook County Jail Chicago, 1996
- 433 Assessing Adolescent Pregnancy Maine, 1980–1996
- 438 Notice to Readers

Assessment of Sexually Transmitted Diseases Services in City and County Jails — United States, 1997

Approximately 15 million arrests were made in the United States in 1995, and the number of persons incarcerated has increased 72% since 1990 (1). At any given time, approximately 567,000 persons are incarcerated in local jails (i.e., county or city correctional facilities housing persons serving short-term sentences or awaiting trial) (1). The prevalence of sexually transmitted diseases (STDs) among incarcerated women is high: syphilis, 35%; chlamydia, 27%; and gonorrhea, 8% (2,3). However, limited information is available about the extent of STD diagnosis and treatment services in correctional facilities. During July–August 1997, CDC conducted a survey of STD testing and treatment policies and practices in jails. This report summarizes the results of the survey, which indicates that most facilities treat for STDs based on symptoms or by arrestee request and do not routinely screen asymptomatic persons.

Counties were selected on the basis of the following criteria: 1) counties reporting >40 cases of primary and secondary syphilis in 1996; or 2) counties containing cities with populations >200,000 persons, regardless of STD morbidity. STD program managers, in collaboration with county health department officials and administrative personnel at the main jail facilities in the sampled counties, completed the survey. STD testing policy was classified as routine (provided to all arrestees), symptomatic (provided to arrestees who indicate signs or symptoms of an STD), by request (provided to arrestees who request STD testing), or not provided. STD testing rates were calculated using reported monthly testing and admission data.

Of the 92 counties surveyed, 88 (96%) completed the assessment, representing 115 city and county jails. Of these 115 facilities, 94 (82%) housed both men and women, 13 (11%) housed men only, and eight (7%) housed women only.

Less than half (range: 12%–47%) of the facilities had a policy of offering routine STD testing to arrestees for chlamydia, gonorrhea, or syphilis (Table 1). However, in jails with routine testing policies, less than half (range: 3%–48%) of arrestees were tested for any of the three diseases (Table 2). More than half (52%–77%) of the facilities offered STD testing to symptomatic arrestees or to arrestees who requested testing for chlamydia, gonorrhea, or syphilis (Table 1). In these facilities, <8% of women and <3% of men were tested for any of the three diseases. Ten (9%) facilities had a policy of offering routine syphilis screening using rapid plasma reagin (Stat RPR) (a 15-minute on-site test using venipuncture blood). In these facilities, syphilis testing rates for

Sexually Transmitted Diseases Services — Continued

TABLE 1. Number and percentage of jail facilities with a policy of offering sexually transmitted disease and pregnancy testing*, by testing policy, sex, and type of test — United States, 1997

| | Type of test | | | | | | | | | | | | |
|--|--------------|-------|-----|--------|-----|--------|------------------------|-------|--|--|--|--|--|
| | Chla | mydia | Gon | orrhea | Syl | philis | Pregnancy [†] | | | | | | |
| Policy/Sex | No. | (%) | No. | (%) | No. | (%) | No. | (%) | | | | | |
| Provided routine testing | | | | | | | | | | | | | |
| Women | 20 | (20%) | 23 | (22%) | 48 | (47%) | 34 | (33%) | | | | | |
| Men | 13 | (12%) | 17 | (16%) | 49 | (46%) | N/A | | | | | | |
| Provided testing to arrestees who had symptoms or who requested testing | | | | | | | | | | | | | |
| Women | 74 | (72%) | 73 | (72%) | 53 | (52%) | 64 | (63%) | | | | | |
| Men | 76 | (71%) | 82 | (77%) | 57 | (53%) | N/A | | | | | | |
| Did not test | | | | | | | | | | | | | |
| Women | 8 | (8%) | 6 | (6%) | 1 | (1%) | | | | | | | |
| Men | 18 | (17%) | 8 | (7%) | 1 | (1%) | | | | | | | |

^{*107} facilities for men and 102 facilities for women.

TABLE 2. Percentage of arrestees tested for sexually transmitted diseases and pregnancy, by testing policy and sex — United States, 1997

| | Type of test | | | | | | | | | | | |
|--|--------------|-----------|----------|-----------|--|--|--|--|--|--|--|--|
| Policy/Sex | Chlamydia | Gonorrhea | Syphilis | Pregnancy | | | | | | | | |
| Provided routine testing | | | | | | | | | | | | |
| Women | 29% | 35% | 48% | 39% | | | | | | | | |
| Men | 3% | 14% | 48% | N/A | | | | | | | | |
| Provided testing to arrestees who had symptoms or who requested testing | | | | | | | | | | | | |
| Women | 3% | 4% | 7% | 4% | | | | | | | | |
| Men | 0.4% | 0.5% | 2% | N/A | | | | | | | | |

women (70%) and men (72%) were higher than rates for facilities where no Stat RPR was available. Twenty-nine facilities (28%) had a policy of routinely offering both pregnancy and syphilis testing. In these facilities, 47% of women were tested for syphilis and 40% were tested for pregnancy.

Approximately half of arrestees were released within 48 hours after incarceration. Approximately 45% of facilities received STD test results >48 hours after testing.

Most facilities used protocols to guide STD treatment (92%) and screening (73%). Fifty-six percent of facilities used the 1993 CDC STD treatment guidelines (4), and 19% used the 1993 CDC *Chlamydia* screening guidelines (5).

Reported by: Div of STD Prevention, National Center for HIV, STD, and TB Prevention, CDC.

[†] Four facilities did not provide information.

Sexually Transmitted Diseases Services — Continued

Editorial Note: The findings in this report indicate that most facilities had a policy of STD screening based on symptoms or arrestee request. Less than half of the facilities had a policy of offering routine testing. In those facilities with a policy of routine testing, less than half of the arrestees were actually tested. Many STDs, including chlamydia, gonorrhea, and syphilis, can be asymptomatic and can only be detected through routine screening activities (6). Therefore, routine testing policies and greater implementation of existing routine testing policies in jails can increase STD diagnosis and treatment. Previous studies support the use of rapid syphilis testing and document its effectiveness in increasing diagnosis and treatment of syphilis in jail populations (2,7). Routinely offering women pregnancy and Stat RPR testing at incarceration can prevent congenital syphilis (2).

Although most facilities reported using STD treatment and screening guidelines from some source, the CDC guidelines were not widely used. To increase the number of arrestees diagnosed and treated for STDs and to improve the quality of the services delivered, CDC STD treatment guidelines or other evidence-based guidelines should be used. This can be achieved by the continued communication between health departments and jail facilities and by increasing the number of jail personnel attending STD training.

Because the data for this survey were based on monthly testing and admission data reported to STD program managers, they may not represent true STD testing rates. However, in the absence of active STD surveillance, these data provide the most reliable estimates.

Treatment of persons after release is labor intensive, often unsuccessful (2,8), and represents a missed opportunity for STD control and prevention. Arrestees are a transient population with limited access to health care (7,9). A comprehensive STD control and prevention strategy should incorporate correctional facilities as an important setting for public health intervention (6,10). Health departments and correctional facilities can benefit from a partnership that facilitates STD testing and treatment in jails in areas with high rates of disease.

References

- 1. Gilliard D, Beck A. Bureau of Justice Statistics: prison and jail inmates at midyear, 1997. Washington DC: US Department of Justice, 1998.
- Blank S, McDonnell D, Rubin S, et al. New approaches to syphilis control: finding opportunities
 for syphilis treatment and congenital syphilis prevention in a women's correctional setting.
 Sex Transm Dis 1997;24:218–28.
- 3. Holmes M, Safyer S, Bickell N, Vermund S, Hanff P, Phillips R. Chlamydial cervical infection in jailed women. Am J Public Health 1993;83:551–5.
- 4. CDC. 1993 Sexually transmitted diseases treatment guidelines. MMWR 1993;42(no. RR-14).
- 5. CDC. Recommendations for the prevention and management of *Chlamydia trachomatis* infections, 1993. MMWR 1993;42(no. RR-12).
- 6. Institute of Medicine. Committee on Prevention and Control of Sexually Transmitted Diseases. In: Eng TR, Butler WT, eds. The hidden epidemic: confronting sexually transmitted diseases. Washington, DC: National Academy Press, 1997.
- 7. Beltrami J, Cohen D, Hamrick J, Farley T. Rapid screening and treatment for sexually transmitted diseases in arrestees: a feasible control measure. Am J Public Health 1997;87:1423–6.
- 8. Heimberger T, Change W, Birkhead G, et al. High prevalence of syphilis detected through a jail screening program. Arch Intern Med 1993;153:1799–804.
- 9. Glaser J, Greifinger R. Correctional health care: a public health opportunity. Ann Intern Med 1993;118:139–45.
- 10. Skolnick A. Look behind bars for key to control of STDs. JAMA 1998;279:97-8.

Syphilis Screening Among Women Arrestees at the Cook County Jail — Chicago, 1996

Cook County (Chicago) Department of Corrections (i.e., Cook County Jail [CCJ]) is one of the largest jail systems in the United States, with a daily census of approximately 10,000 arrestees. CCJ contracts with Cermak Health Services (CHS)* to provide medical services, including routine syphilis screening, to arrestees at CCJ. On January 6, 1996, the Chicago Department of Public Health (CDPH) STD/HIV Program, in collaboration with the CCJ, CHS, and CDC, implemented the Rapid Plasma Reagin (Stat RPR) Project at CCJ to improve syphilis identification and treatment rates among women. This report describes the project and provides data from the first year of operation. The findings indicate that Stat RPR yields a higher treatment rate for women arrestees than routine syphilis testing.

The Stat RPR project provides testing on admission to all women arrestees entering CCJ during the second shift (3 p.m.–11 p.m.), Monday through Friday. All women arrestees who are screened consent to testing. A four-step protocol is followed. First, CDPH staff perform the Stat RPR (a 15-minute on-site test using venipuncture blood), then a routine quantitative RPR is performed on site for all samples that were reactive to Stat RPR. Second, CDPH staff review the Chicago syphilis registry, a computerized database of reactive syphilis serologies (screening and confirmatory) and treatment histories, to determine whether women arrestees with reactive serologies are in the registry and require treatment based on standard serologic criteria (CDC's 1993 STD treatment guidelines [1]). Third, CDPH staff notify the CCJ physician's assistant (PA) of women with reactive serologies who have an indication for treatment. Finally, the PA provides on-site clinical examination, diagnosis, and treatment to women arrestees within a few hours after the initial test.

Women admitted on the weekend and during the first and third shifts on weekdays received off-site syphilis screening using a quantitative RPR. Arrestees with reactive serologies who met standard criteria for treatment were examined at the CCJ STD clinic, usually within 3–5 days of testing.

Of the 616 women with positive Stat RPR tests during 1996, a total of 158 (26%) had indications for treatment. Of these, 125 (79%) received treatment the same day, eight (5%) received treatment at a later date at CCJ, and 25 (16%) were released before receiving treatment. A total of 133 (84%) women with indications for treatment were treated before release; of these, 128 (96%) were later confirmed as having syphilis by fluorescent treponemal antibody absorbed (FTA-ABS). Of the 25 women released before treatment, six (24%) could not be located on follow-up, and 12 (48%) were not followed up.

Of the 597 women with positive screening tests by routine RPR, 226 (38%) had indications for treatment. Of these, 94 (42%) received treatment at CCJ, and 132 (58%) were released before receiving treatment. Of women who received treatment at CCJ, 91 (97%) were later confirmed as having syphilis by FTA-ABS. Of the 132 women released before treatment, 60 (45%) could not be located on follow-up, and 24 (18%) were not followed up. Women screened with Stat RPR were more likely than women screened with routine RPR to receive treatment before release (relative risk=2.0; 95% confidence interval=1.7–2.4).

^{*}Use of trade names and commercial sources is for identification only and does not imply endorsement by CDC or the U.S. Department of Health and Human Services.

Syphilis Screening — Continued

Reported by: H Beidinger, MPH, J Jenks, D Broussard, Chicago Dept of Public Health. Div of STD Prevention, National Center for HIV, STD, and TB Prevention, CDC.

Editorial Note: Rapid STD diagnosis and treatment before release is critical for syphilis control and prevention in incarcerated populations because many arrestees are released within a few days after entering a jail facility (2). After release, many arrestees are difficult to reach, may not seek treatment in the absence of symptoms (3), and may have limited access to health care (2,4). The findings in this report indicate that rapid syphilis screening methods improve syphilis treatment rates. Compared with routine screening methods, the use of on-site Stat and quantitative RPR substantially reduced the percentage of women with reactive serologies released before receiving treatment and the percentage of women requiring follow up after release.

As syphilis rates among women in Chicago have declined and as screening in CCJ has increased, the proportion of disease that occurs in CCJ women arrestees has increased. In 1995, CCJ reported 10% (108 of 1041) of early syphilis cases among women in Chicago. After implementation of the Stat RPR project in 1996, early syphilis morbidity reported from CCJ increased to 22% of the city's total (176 of 803). Compared with 1995, early syphilis morbidity rates per 100,000 women in Chicago in 1996 decreased by 24% (68 to 52). Although the findings from this study do not establish a direct association between syphilis morbidity in Chicago and in CCJ, they indicate that declining syphilis morbidity in Chicago may be related, in part, to improved syphilis diagnosis and treatment of women arrestees who would not otherwise be diagnosed and treated outside the jail.

This project demonstrates that Stat RPR screening in jails can substantially improve the treatment rates of women with reactive serologies for syphilis before release and prevent the release of infected women to the community where disease and transmission of infection could continue unabated. Broad implementation of such interventions could help decrease overall syphilis morbidity in Chicago and the United States.

References

- 1. CDC. 1993 Sexually transmitted diseases treatment guidelines. MMWR 1993;42(no. RR-14).
- Beltrami J, Cohen D, Hamrick J, Farley T. Rapid screening and treatment for sexually transmitted diseases in arrestees: a feasible control measure. Am J Public Health 1997;87:1423–6.
- 3. Blank S, McDonnell D, Rubin S, et al. New approaches to syphilis control: finding opportunities for syphilis treatment and congenital syphilis prevention in a women's correctional setting. Sex Transm Dis 1997;24:218–28.
- 4. Glaser J, Greifinger R. Correctional health care: a public health opportunity. Ann Intern Med 1993;118:139–45.

Assessing Adolescent Pregnancy — Maine, 1980–1996

Despite prevention efforts at the state and federal levels, adolescent pregnancy rates in the United States are among the highest in developed countries (1). The 1996 Personal Responsibility and Work Opportunity Reconciliation Act* mandates a national strategy to prevent pregnancy among teenagers and requires that states establish goals to reduce the incidence of "out-of-wedlock" pregnancies, particularly among teenagers. Adolescent pregnancy and birth rates are declining across the na-

^{*}Public Law 104-193.

tion (2); in particular, the rates have decreased substantially in Maine (2). This report summarizes an evaluation of pregnancy rates for persons aged 15–19 years in Maine and an assessment of clinical and behavioral factors that may have contributed to decreasing rates during 1980–1996 by the Maine Department of Human Services, Bureau of Health (MBH); the Family Planning Association of Maine (FPA); and CDC. From 1980 through 1996, pregnancy rates in Maine among females aged 15–19 years decreased from 67.9 to 45.6 pregnancies per 1000. A decrease in oral contraceptive (OC) use and increases in the use of condoms and long-acting methods were significantly correlated with the decrease in adolescent pregnancy rates from 1984 to 1996.

Maine vital statistics data for 1980-1996 were used to assess adolescent pregnancies, births, and abortions by age, marital status, education, partner's age, and previous pregnancies. Annual reports from FPA, the only recipient of Title X[†] funds in Maine and the largest provider of reproductive health-care services in the state, were used to examine clinical factors that may have contributed to decreasing adolescent pregnancy rates (e.g., what contraceptive methods clients reported using). The Maine Pregnancy Risk Assessment Monitoring System (PRAMS), a survey of new mothers about pregnancy behaviors, practices, and outcomes, was used to determine the number and rate of unintended pregnancies among adolescents who gave birth. Chlamydia rates from the MBH Sexually Transmitted Diseases Surveillance System were used as a proxy indicator to help evaluate trends in unprotected intercourse among adolescents. The Maine Youth Risk Factor Behavior Survey, a survey of adolescents in grades 9-12, was used to obtain information about adolescent sexual behavior. Data from the Maine Department of Education were used to assess high school drop-out rates and the percentage of high school seniors who intended to pursue postsecondary education.

Adolescent pregnancy rates were calculated as the total reported live-born infants, abortions, and fetal deaths per 1000 females in Maine for females aged 15–17, 18–19, and 15–19 years (3); fetal losses at <20 weeks' gestation were not included. Population data are from the MBH, Office of Data, Research and Vital Statistics. Trends in adolescent pregnancy, birth, and abortion rates were tabulated by demographic variables, and changes in potential explanatory variables were examined over time. Correlation coefficients (r) and p values were used to assess the strength and significance of correlations between these factors and adolescent pregnancy rates.

From 1980 through 1996, pregnancy rates in Maine among females aged 15–19 years decreased from 67.9 to 45.6 pregnancies per 1000; the largest decrease occurred from 1991 to 1992 (Table 1, Figure 1). Both birth and abortion rates decreased among females aged 15–17 and 18–19 years. Among females aged 15–19 years, the percentage of pregnancies among those who were unmarried increased from 58% to 83%, while the percentage of pregnancies among those with a previous pregnancy decreased from 29% to 24%. There were no substantial changes in mean years of education or partner's age among adolescents who became pregnant.

From 1984 through 1996, the percentage of females aged 15–19 years who were seen at FPA clinics was approximately 22% per year (Table 1). OCs have been the predominant family planning method of adolescents at the FPA clinics, but the percentage using OCs declined from 75% to 58%. Condom use increased from 5% to 14%, and

[†]Title X provides federal grants for family planning services to adolescents and low-income women.

Males and females

TABLE 1. Pregnancy rates* and potential determinants of pregnancy among adolescents, by percentage or rate, and correlations between the potential determinants and adolescent pregnancy rates — Maine, 1980-1996

| | | | | | | | | _ | | n school | | |
|---|----------------|---|--------|---------------------|----------------------|-----------------|-------|---------------------|--------------------|---------------------|--|--|
| - | | Females aged 15–19 years % of FPA [†] clients reporting Births unintended | | | | | | | | | | |
| | | % Who | | ry contracep | | | | conception | % High | to pursue post- | | |
| Year | Pregnancy rate | were FPA clients | OCs§ | Condoms | Long-acting methods¶ | Chlamydia rates | % | (95% CI**) | school dropouts | secondary education | | |
| 1980 | 67.9 | | | | | | | | 4.2% | 44.8% | | |
| 1981 | 60.7 | | | | | | | | 3.9% | 45.9% | | |
| 1982 | 55.7 | | | | | | | | 3.6% | 45.7% | | |
| 1983 | 60.5 | | | | | | | | 3.6% | 47.7% | | |
| 1984 | 63.2 | 21.8% | 75.4% | 5.2% | 0.4% | | | | 3.6% | 51.1% | | |
| 1985 | 63.5 | 22.5% | 78.0% | 4.5% | 0.3% | | | | 3.5% | 53.6% | | |
| 1986 | 61.1 | 23.6% | 81.0% | 3.8% | 0.2% | | | | 3.5% | 56.3% | | |
| 1987 | 58.3 | 24.1% | 82.4% | 4.1% | 0.1% | | | | 3.8% | 56.6% | | |
| 1988 | 63.6 | 22.2% | 81.8% | 5.3% | 0.1% | 27.4 | | | 4.0% | 56.7% | | |
| 1989 | 64.2 | 23.3% | 80.0% | 5.9% | 0.1% | 30.4 | 65.0% | (54.6%-75.3%) | 3.7% | 53.6% | | |
| 1990 | 64.7 | 23.8% | 78.4% | 6.7% | 0.0% | 29.8 | 70.7% | (60.2%-81.3%) | 3.3% | 54.7% | | |
| 1991 | 62.9 | 23.7% | 77.9% | 6.9% | 0.1% | 21.4 | 60.5% | (49.7%-71.3%) | 3.0% | 56.6% | | |
| 1992 | 50.9 | 21.7% | 78.3% | 7.5% | 0.3% | 15.7 | 80.5% | (69.3%-91.8%) | 2.9% | 56.4% | | |
| 1993 | 52.3 | 22.2% | 74.4% | 9.7% | 1.2% | 13.0 | 76.4% | (65.5%-87.3%) | 2.7% | 57.8% | | |
| 1994 | 50.2 | 21.7% | 68.7% | 10.8% | 4.4% | 10.3 | 72.1% | (60.0%-83.9%) | 2.9% | 58.4% | | |
| 1995 | 49.3 | 26.0% | 55.1% | 12.0% | 10.1% | 10.8 | 85.2% | (75.8%-94.5%) | 3.0% | 59.4% | | |
| 1996 | 45.6 | 23.9% | 58.5% | 14.1% | 11.2% | 7.5 | 76.5% | (65.8%-87.2%) | 2.9% | 62.1% | | |
| Correlation with adolescent preg- nancy rates (r) | | -0.12 | 0.76†† | -0.85 ^{††} | -0.77 ^{††} | 0.96†† | | -0.77 ^{††} | 0.74†† | -0.57 ^{††} | | |

^{*}Per 1000 female population aged 15–19 years. †Family Planning Association of Maine.

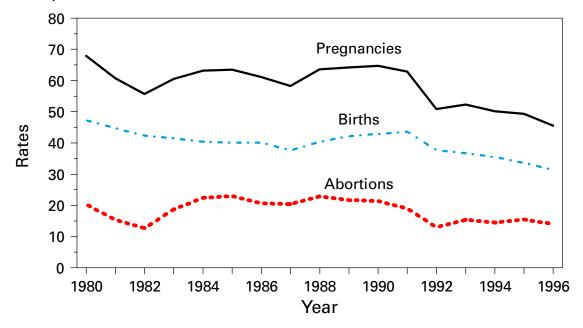
[§] Oral contraceptives.

[¶]E.g., Norplant® (Wyeth-Ayerst, Philadelphia, Pennsylvania) and Depo-Provera® (The Upjohn Company, Kalamazoo, Michigan). Use of trade names and commercial sources is for identification only and does not imply endorsement by CDC or the U.S. Department of Health and Human Services.

^{**}Confidence interval

^{††} p<0.05.

FIGURE 1. Pregnancy, birth, and abortion rates per 1000 females aged 15–19 years—Maine, 1980–1996



the use of long-acting contraceptive methods (primarily Norplant^{®§} [Wyeth-Ayerst, Philadelphia, Pennsylvania] and Depo-Provera[®] [The Upjohn Company, Kalamazoo, Michigan]) increased from <1% to 11%. Both the decrease in OC use and the increase in use of condoms and long-acting contraceptive methods among FPA clients were significantly correlated with the decrease in adolescent pregnancy rates from 1984 to 1996 (r=0.76, -0.85, and -0.77, respectively).

Changes in some behavioral factors also were significantly correlated with the decrease in adolescent pregnancy rates. From 1988 to 1996, rates for chlamydia among females aged 15–19 years (a proxy for having unprotected intercourse) decreased from 27 to eight cases per 1000 (correlation with decrease in adolescent pregnancy rates: r=0.96). From 1989 to 1996, unintended pregnancies among adolescent females who gave birth increased from 65% to 77% (correlation with decrease in adolescent pregnancy rates: r=-0.77). Among males and females, from 1980 to 1996, the high school dropout rate decreased from 4% to 3% (correlation with decrease in adolescent pregnancy rates: r=0.74), and the percentage of high school seniors who indicated a goal to pursue postsecondary education increased from 45% to 62% (correlation with decrease in adolescent pregnancy rates: r=-0.57). The percentage of males and females aged 15–19 years who had ever had sexual intercourse was 58% in 1991, 49% in 1995, and 52% in 1997; the changes in these percentages were not statistically significant.

Reported by: E Kieltyka, Family Planning Association of Maine, Augusta; J Foster, F Antonicci, Maine Dept of Education; F Wolman, MD, D Hall, MN, B Corkum, DA Mills, MD, Bur of Health, Maine Dept of Human Svcs. Div of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion; Div of Health Promotion Statistics, National Center for Health Statistics; Div of Applied Public Health and Training (proposed), Epidemiology Program Office; and an EIS Officer, CDC.

[§]Use of trade names and commercial sources is for identification only and does not imply endorsement by CDC or the U.S. Department of Health and Human Services.

Editorial Note: A thorough assessment of factors influencing adolescent pregnancy rates at the state level can be used to target adolescent pregnancy prevention efforts and evaluate progress toward national health objectives for 2000. This retrospective assessment of pregnancy rates among adolescents in Maine illustrates how states can identify trends in adolescent pregnancy rates and associated factors. In Maine, changes in behavioral factors may have had the greatest impact on adolescent pregnancy rates, including increased condom use, decreased high school drop-out rates, and increased intent to pursue postsecondary education. The use of long-acting contraceptive methods was rare before 1993 and therefore could not have contributed to the large decrease in adolescent pregnancy rates from 1991 to 1992. Decreases in rates for chlamydia may indicate a decrease in the incidence of unprotected intercourse among this group.

This report is subject to at least five limitations. First, a critical factor that could not be assessed adequately was the school health education program in Maine. However, the 1996 Maine School Health Education Profile indicates that 97% of public middle schools and senior high schools require education about human immunodeficiency virus; of those schools, 85% taught condom efficacy and 62% taught correct use of condoms (J. Foster, Maine Department of Education, personal communication, 1998). Second, individual characteristics or behaviors could not be connected to the outcome of adolescent pregnancy and persons could not be followed over time. Third, data were incomplete for some factors that were examined and lacking for other potentially important determinants (e.g., patterns of care and visits at family-planning clinics and qualitative data about attitudes of adolescents over time). Fourth, most of the data had not been computerized, which limited analytic possibilities. Finally, changes in reporting practices over time could account for the change in pregnancy rates among adolescents; however, there were no obvious changes in reporting practices during 1980–1996 (Maine Vital Statistics Office, personal communication, 1998).

As a result of the findings in this report, the collaborating agencies have recommended the development of a prospective system to monitor and assess adolescent pregnancy rates and potential determinants of risk for pregnancy among adolescents. The Maine Adolescent Pregnancy Assessment Team would be a collaboration between agencies that collect data and agencies that use the data in making decisions on policies and programs (i.e., FPA; state departments of human services, education, and labor; and other state, professional, and community-based organizations). Changes in existing data availability and evaluation (providing adequate confidentiality) would need to facilitate 1) access to data about persons to allow follow-up over time, 2) examination of data by relevant geographic areas (e.g., county, school district, or community), 3) the linking of vital statistics and family planning clinic data to adolescents' clinic experience and pregnancy status, and 4) access to additional relevant data sources (e.g., the Maine School Health Education Profile). The information would enable policy makers and program planners to develop plans for adolescent pregnancyprevention efforts. Other states may want to consider using a similar prospective assessment of adolescent pregnancy rates and potential determinants to better guide research and prevention efforts at the state level.

References

1. Jones EF, Forrest JD, Goldman N, et al. Teenage pregnancy in industrialized countries. New Haven, Connecticut: Yale University Press, 1986.

- 2. CDC. State-specific pregnancy and birth rates among teenagers—United States, 1991–1992. MMWR 1995;44:677–84.
- 3. Spitz AM, Velebil P, Koonin LM, et al. Pregnancy, abortion, and birth rates among US adolescents—1980, 1985, and 1990. JAMA 1996;275:989–94.

Notice to Readers

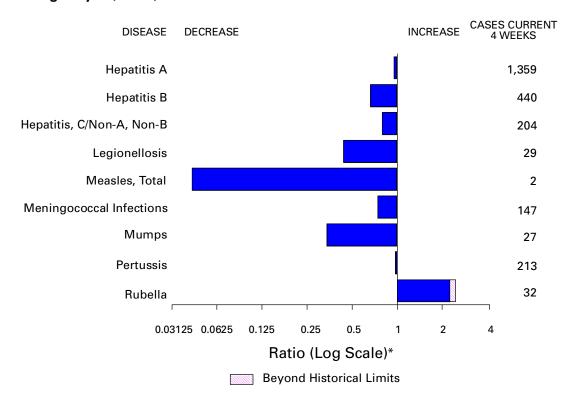
Availability of Applications for Public Health Leadership Institute

The CDC/University of California Public Health Leadership Institute (PHLI) is a 1-year scholars' program that includes an intensive on-site week, scheduled for March 13–19, 1999. The PHLI is conducted under a cooperative agreement between CDC's Public Health Practice Program Office and the University of California at Los Angeles. The purpose of the PHLI is to strengthen the U.S. public health system by enhancing the leadership capacities of senior city, county, state, federal, and international public health officials.

The eighth year of the PHLI will begin November 14, 1998, with an orientation for PHLI scholars at the American Public Health Association annual meeting in Washington, D.C. Approximately 35 senior public health officials from city, county, state, federal, and international health agencies will be selected to participate in the Institute.

Senior state and local health officials, including "deputy" level staff nominated by state health directors, or local health directors with a service population of >200,000 are eligible to apply. Applications must be submitted no later than August 15, 1998. Selected scholars will be notified during the week of September 29, 1998. Additional information and applications are available from the Director, PHLI, telephone (510) 986-0140.

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending May 30, 1998, with historical data — United States



^{*}Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — provisional cases of selected notifiable diseases, United States, cumulative, week ending May 30, 1998 (21st Week)

| | Cum. 1998 | | Cum. 1998 |
|--|---|---|--|
| Anthrax Brucellosis Cholera Congenital rubella syndrome Cryptosporidiosis* Diphtheria Encephalitis: California* eastern equine* St. Louis* western equine* Hansen Disease Hantavirus pulmonary syndrome* Hemolytic uremic syndrome, post-diarrheal* HIV infection, pediatric*§ | 9 3 2 693 1 - - - 45 2 11 | Plague Poliomyelitis, paralytic [¶] Psittacosis Rabies, human Rocky Mountain spotted fever (RMSF) Streptococcal disease, invasive Group A Streptococcal toxic-shock syndrome* Syphilis, congenital** Tetanus Toxic-shock syndrome Trichinosis Typhoid fever Yellow fever | - 17 - 38 939 29 70 10 54 5 |

^{-:} no reported cases

^{*}Not notifiable in all states.

† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).

§ Updated monthly to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update May 24, 1998.

¶ One suspected case of polio with onset in 1998 has also been reported to date.

^{**}Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending May 30, 1998, and May 24, 1997 (21st Week)

| | AIDS | | | | coli O | | _ | _ | Нера | |
|------------------------|--------------|----------------|-----------------|------------------|----------------------------|----------------------------|-------------------------|-----------------|--------------|--------------|
| | Cum. | Cum. | Chlai Cum. | mydia Cum. | NETSS [†] Cum. | PHLIS [§] Cum. | Gono Cum. | rrhea Cum. | C/N/ Cum. | A,NB Cum. |
| Reporting Area | 1998* | 1997 | 1998 | 1997 | 1998 | 1998 | 1998 | 1997 | 1998 | 1997 |
| UNITED STATES | 20,034 | 24,160 | 203,583 | 183,020 | 404 | 224 | 119,601 | 110,281 | 1,592 | 1,165 |
| NEW ENGLAND Maine | 640 13 | 745 25 | 7,462 364 | 6,963 368 | 44 1 | 30 | 1,924 14 | 2,375 22 | 19 - | 27 |
| N.H. | 21 | 14 | 365 | 312 | 8 | 6 | 34 | 54 | - | - |
| Vt. Mass. | 10 275 | 18 279 | 151 3,395 | 163 2,816 | 21 | - 18 | 12 826 | 23 883 | - 18 | 1 24 |
| R.I. | 58 | 55 354 | 1,011 | 845 | 3 | 1 5 | 149 | 198 | 1 | 2 |
| Conn. MID. ATLANTIC | 263 5,695 | 354 8,107 | 2,176 25.636 | 2,459 22,821 | 11 38 | 10 | 889 14.352 | 1,195 13,997 | - 157 | - 127 |
| Upstate N.Y. | 710 | 1,334 | N | N | 30 | - | 2,416 | 2,458 | 127 | 98 |
| N.Y. City N.J. | 3,153 993 | 4,136 1,696 | 13,996 3,803 | 12,274 4,138 | 2 6 | 5 4 | 5,899 2 <i>.</i> 476 | 5,531 2,884 | - | - |
| Pa. | 839 | 941 | 7,837 | 6,409 | N | 1 | 3,561 | 3,124 | 30 | 29 |
| E.N. CENTRAL Ohio | 1,518 281 | 1,638 348 | 34,316 9,889 | 29,844 9,055 | 68 23 | 38 6 | 23,224 5,991 | 17,427 5,562 | 195 6 | 280 7 |
| Ind. | 293 | 301 | 2,902 | 3,475 | 10 | 19 | 1,894 | 2,398 | 3 | 6 |
| III. Mich. | 610 252 | 504 394 | 9,934 8,486 | 5,306 7,672 | 18 17 | - 5 | 7,806 6,335 | 2,595 5,073 | 7 179 | 45 207 |
| Wis. | 82 | 91 | 3,105 | 4,336 | N | 8 | 1,198 | 1,799 | - | 15 |
| W.N. CENTRAL | 351 56 | 497 83 | 12,247 | 12,616 | 51 | 28 | 6,046 | 5,577 908 | 103 | 27 2 |
| Minn. Iowa | 20 | 58 | 1,830 1,692 | 2,643 1,908 | 20 6 | 14 - | 650 528 | 485 | 12 | 12 |
| Mo. N. Dak. | 176 4 | 253 4 | 4,691 290 | 4,686 343 | 8 1 | 12 1 | 3,500 29 | 3,061 23 | 87 - | 4 2 |
| S. Dak. | 9 | 2 | 616 | 463 | 1 | - | 104 | 46 | - | - |
| Nebr. Kans. | 36 50 | 34 63 | 920 2,208 | 800 1,773 | 6 9 | - 1 | 331 904 | 282 772 | 2 2 | 1 6 |
| S. ATLANTIC | 5,037 | 5,885 | 43,057 | 34,090 | 32 | 14 | 35,002 | 32,777 | 73 | 84 |
| Del. Md. | 57 571 | 111 727 | 1,036 3,343 | 612 2,856 | 10 | 1 4 | 543 3,693 | 443 4,701 | 3 | - 1 |
| D.C. | 413 | 400 | N | N | 1 | - | 1,416 | 1,621 | - | - |
| Va. W. Va. | 368 47 | 484 38 | 3,665 1,151 | 4,399 1,284 | N N | 7 | 2,459 324 | 3,279 399 | 3 3 | 8 6 |
| N.C. | 335 | 362 | 9,143 | 6,743 | 7 | 2 | 7,696 | 6,518 | 11 | 23 |
| S.C. Ga. | 318 608 | 293 691 | 7,534 9,932 | 4,988 3,482 | 1 2 | - | 4,874 8,270 | 4,494 4,551 | 8 | 19 - |
| Fla. | 2,320 | 2,779 | 7,253 | 9,726 | 10 | - | 5,727 | 6,771 | 45 | 27 |
| E.S. CENTRAL Ky. | 788 101 | 722 111 | 14,023 2,518 | 13,506 2,674 | 29 7 | 9 | 13,118 1,385 | 13,696 1,746 | 57 9 | 145 6 |
| Tenn. | 272 | 303 | 5,166 | 5,015 | 17 | 9 | 4,339 | 4,210 | 45 | 87 |
| Ala. Miss. | 233 182 | 196 112 | 3,608 2,731 | 3,256 2,561 | 5 - | - | 4,621 2,773 | 4,566 3,174 | 3 | 5 47 |
| W.S. CENTRAL | 2,473 | 2,558 | 28,112 | 21,001 | 24 | 4 | 16,240 | 14,096 | 458 | 129 |
| Ark. La. | 81 415 | 96 461 | 1,235 4,720 | 1,066 3,194 | 1 | 1 | 1,114 4,021 | 1,771 3,029 | 1 2 | 5 78 |
| Okla. | 134 | 138 | 4,052 | 3,000 | 3 | 3 | 2,179 | 1,874 | 4 | 4 |
| Tex. MOUNTAIN | 1,843 725 | 1,863 706 | 18,105 7,302 | 13,741 10,611 | 20 36 | - 27 | 8,926 2.695 | 7,422 2,902 | 451 193 | 42 140 |
| Mont. | 13 | 18 | 475 | 415 | 2 | - | 22 | 16 | 4 | 5 |
| ldaho Wyo. | 14 2 | 22 13 | 769 275 | 590 211 | 4 | - | 69 11 | 44 24 | 80 29 | 20 48 |
| Colo. | 127 | 194 | - | 1,897 | 8 | 8 | 941 | 754 | 11 | 17 |
| N. Mex. Ariz. | 111 286 | 66 157 | 1,531 3,315 | 1,578 4,112 | 8 N | 6 7 | 284 1,213 | 359 1,295 | 39 1 | 27 15 |
| Utah | 57 | 46 | 684 | 674 | 10 | 1 | 63 | 88 | 16 | 2 |
| Nev. PACIFIC | 115 2,807 | 190 3,302 | 253 31,428 | 1,134 31,568 | 4 82 | 5 64 | 92 7,000 | 322 7,434 | 13 337 | 6 206 |
| Wash. | 203 | 287 | 4,511 | 3,728 | 20 | 22 | 755 | 803 | 10 | 10 |
| Oreg. Calif. | 88 2,463 | 144 2,825 | 2,237 23,088 | 1,891 24,722 | 23 39 | 21 18 | 304 5,638 | 287 5,978 | 2 271 | 2 125 |
| Alaska | 12 41 | 18 28 | 769 823 | 564 663 | N | 3 | 138 | 178 | 1 53 | 69 |
| Hawaii Guam | 41 | 20 | 623 8 | 189 | N N | - | 165 2 | 188 25 | - - | - |
| P.R. | 834 | 517 | U | U | - | U | 158 | 250 | - | 44 |
| V.I. Amer. Samoa | 17 - | 34 | N - | N - | N N | U | - | - | - | - |
| C.N.M.I. | - | 1 | N | N | Ň | Ŭ | 7 | 15 | - | 2 |

N: Not notifiable

U: Unavailable

-: no reported cases

C.N.M.I.: Commonwealth of Northern Mariana Islands

^{*}Updated monthly to the Division of HIV/AIDS Prevention-Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention,

last update May 24, 1998.

†National Electronic Telecommunications System for Surveillance.

§Public Health Laboratory Information System.

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending May 30, 1998, and May 24, 1997 (21st Week)

| | Legion | iellosis | Ly: Dise | me ease | Mai | aria | Syp (Primary & | | Tubero | culosis | Rabies, Animal |
|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------------|--------------|---------------|--------------|-------------------|
| Reporting Area | Cum. 1998 | Cum. 1997 | Cum. 1998 | Cum. 1997 | Cum. 1998 | Cum. 1997 | Cum. 1998 | Cum. 1997 | Cum. 1998* | Cum. 1997 | Cum. 1998 |
| UNITED STATES | 397 | 336 | 1,626 | 1,329 | 406 | 531 | 2,671 | 3,525 | 2,817 | 6,527 | 2,715 |
| NEW ENGLAND | 22 | 27 | 396 | 299 | 17 | 23 | 29 | 68 | 114 | 160 | 533 |
| Maine N.H. | 1 2 | 1 4 | 1 8 | 3 7 | 1 3 | 1 2 | 1 1 | - | U 2 | 15 1 | 84 33 |
| Vt. Mass. | 1 8 | 3 11 | 2 93 | 3 55 | - 11 | 2 16 | 2 20 | - 37 | 94 | 2 81 | 30 165 |
| R.I. | 4 | 4 | 27 | 34 | 2 | 2 | - | - | 18 | 13 | 33 |
| Conn. MID. ATLANTIC | 6 87 | 4 58 | 265 976 | 197 810 | - 111 | - 148 | 5 90 | 31 172 | U 217 | 48 1,184 | 188 577 |
| Upstate N.Y. | 26 | 12 | 513 | 103 | 28 | 22 | 12 | 18 | U | 163 | 390 |
| N.Y. City N.J. | 14 4 | 2 8 | 3 124 | 65 222 | 52 17 | 88 27 | 21 18 | 33 80 | U 217 | 621 240 | U 80 |
| Pa. | 43 | 36 | 336 | 420 | 14 | 11 | 39 | 41 | U | 160 | 107 |
| E.N. CENTRAL Ohio | 125 58 | 130 61 | 30 29 | 25 10 | 28 2 | 56 4 | 365 68 | 317 101 | 213 5 | 671 132 | 31 25 |
| Ind. III. | 17 12 | 19 5 | 1 | 9 | 1 6 | 5 27 | 66 138 | 70 34 | Ū 208 | 57 334 | 2 |
| Mich. | 24 | 31 | - | 3 | 18 | 16 | 72 | 45 | U | 103 | 4 |
| Wis. W.N. CENTRAL | 14 28 | 14 25 | U 13 | U 13 | 1 21 | 4 12 | 21 64 | 67 70 | U 95 | 45 193 | - |
| Minn. | 3 | 1 | 4 | 9 | 8 | 5 | 3 | 13 | U | 49 | 284 51 |
| lowa Mo. | 2 11 | 6 2 | 7 | 3 | 2 8 | 4 2 | 48 | 3 35 | U 66 | 20 81 | 59 15 |
| N. Dak. S. Dak. | - | 2 1 | - | - | 1 | - | - 1 | - | U 9 | 4 2 | 52 54 |
| Nebr. | 9 | 10 | - | 1 | - | 1 | 4 | 1 | 5 | 4 | 2 |
| Kans. S. ATLANTIC | 3 51 | 3 42 | 2 142 | - 120 | 2 107 | 94 | 8 1,155 | 18 1,417 | 15 409 | 33 1,139 | 51 872 |
| Del. | 7 | 5 | - | 25 | 1 | 2 | 12 | · 11 | - | 14 | 17 |
| Md. D.C. | 10 3 | 10 2 | 101 4 | 74 5 | 37 7 | 32 6 | 265 31 | 395 53 | 106 45 | 115 35 | 220 |
| Va. W. Va. | 4 N | 8 N | 10 4 | - | 16 | 22 | 72 2 | 116 3 | 89 21 | 111 21 | 261 39 |
| N.C. | 6 | 5 | 3 | 7 | 8 | 6 | 330 | 291 | 148 | 132 | 136 |
| S.C. Ga. | 4 | 2 | 1 2 | 1 1 | 3 13 | 7 12 | 138 213 | 177 251 | U U | 98 213 | 65 45 |
| Fla. | 16 | 10 | 17 | 7 | 22 | 7 | 92 | 120 | U | 400 | 89 |
| E.S. CENTRAL Ky. | 13 8 | 12 - | 19 4 | 27 3 | 10 1 | 14 3 | 433 47 | 781 65 | 152 U | 498 69 | 112 16 |
| Ténn. Ala. | 4 1 | 5 2 | 8 7 | 9 2 | 6 3 | 4 4 | 227 98 | 320 205 | U 152 | 177 168 | 67 29 |
| Miss. | - | 5 | - | 13 | - | 3 | 61 | 191 | Ü | 84 | - |
| W.S. CENTRAL Ark. | 9 | 5 | 5 2 | 4 2 | 10 | 7 1 | 323 48 | 476 65 | 41 41 | 969 80 | 71 1 |
| La. | - | 1 | - | 1 | 4 | 4 | 111 | 163 | - | 77 | - |
| Okla. Tex. | 4 5 | 1 3 | 3 | 1 | 1 5 | 2 | 20 144 | 50 198 | U U | 72 740 | 70 - |
| MOUNTAIN Mont. | 24 1 | 20 1 | 1 | 3 | 20 | 31 2 | 80 | 75 | 128 12 | 209 2 | 63 21 |
| ldaho | - | 2 | - | - | 2 | - | - | - | 4 | 4 | - |
| Wyo. Colo. | 1 4 | 1 4 | - | 1 - | - 7 | 1 15 | 4 | 2 | 2 U | 2 42 | 36 1 |
| N. Mex. Ariz. | 2 4 | 1 5 | - | - 1 | 6 4 | 4 4 | 10 61 | 4 60 | 7 82 | 7 97 | - 5 |
| Utah | 11 | 4 | - | - | 1 | 1 | 3 | 3 | 21 | 10 | - |
| Nev. PACIFIC | 1 38 | 2 17 | 1 44 | 1 28 | 82 | 4 146 | 2 132 | 6 149 | U 1,448 | 45 1,504 | - 172 |
| Wash. | 4 | 4 | 1 | - | 6 | 8 | 7 | 6 | · - | 116 | - |
| Oreg. Calif. | 34 | 12 | 5 38 | 8 20 | 9 66 | 8 126 | 2 123 | 3 138 | U 1,370 | 58 1,213 | 156 |
| Alaska Hawaii | - | - 1 | - | - | 1 | 2 2 | - | 1 1 | 16 62 | 36 81 | 16 |
| Guam | - | - | - | - | - | - | | 3 | - | 13 | |
| P.R. V.I. | - | - | - | - | - | 3 - | 92 | 88 - | 46 | 88 - | 24 |
| Amer. Samoa C.N.M.I. | - | - | - | - | - | - | 1 | - 5 | 8 | - | - |

N: Not notifiable U: Unavailable -: no reported cases

^{*}Additional information about areas displaying "U" for cumulative 1998 Tuberculosis cases can be found in Notice to Readers, MMWR Vol. 47, No. 2, p. 39.

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks May 30, 1998, and May 24, 1997 (21st Week)

| | H. influ | ienzae, | Н | epatitis (Vi | ral), by typ | ре | | | Meas | les (Rubec | ola) | | |
|----------------------|---------------|--------------|--------------|----------------|--------------|---------------|--------|--------------|--------|--------------------|--------------|--------------|--|
| | | sive | - | Α | | 3 | Indi | genous | lmp | orted [†] | | tal | |
| Reporting Area | Cum. 1998* | Cum. 1997 | Cum. 1998 | Cum. 1997 | Cum. 1998 | Cum. 1997 | 1998 | Cum. 1998 | 1998 | Cum. 1998 | Cum. 1998 | Cum. 1997 | |
| UNITED STATES | 453 | 492 | 8,304 | 11,416 | 2,915 | 3,714 | 2 | 8 | - | 10 | 18 | 56 | |
| NEW ENGLAND | 25 | 28 3 | 109 | 271 | 35 | 73 | - | - | - | 1 | 1 | 7 | |
| Maine N.H. | 2 1 | 4 | 12 6 | 35 16 | 7 | 4 5 | - | - | - | - | - | - | |
| Vt. Mass. | 2 18 | 18 | 10 25 | 6 136 | 1 12 | 2 35 | - | - | - | 1 | - 1 | - 7 | |
| R.I. Conn. | 2 | 2 | 8 48 | 22 56 | 15 | 8 19 | - | - | - | - | - | - | |
| MID. ATLANTIC | 66 | 61 | 543 | 1,000 | 435 | 560 | 1 | 2 | _ | 1 | 3 | 12 | |
| Upstate N.Y. | 27 10 | 3 21 | 140 140 | 109 450 | 121 122 | 98 228 | 1 | 1 | - | | 1 | 4 5 | |
| N.Y. City N.J. | 26 | 24 | 113 | 147 | 60 | 107 | - | 1 | - | - | 1 | 2 | |
| Pa. | 3 | 13 | 150 | 294 | 132 | 127 | - | - | - | 1 | 1 | 1 | |
| E.N. CENTRAL Ohio | 63 32 | 78 40 | 1,042 140 | 1,267 173 | 292 28 | 652 39 | 1 - | 3 | - | 2 | 5 - | 6 | |
| Ind. III. | 14 16 | 7 22 | 71 158 | 127 315 | 24 51 | 44 126 | - | 2 | - | 1 - | 3 | - 5 | |
| Mich. | 1 | 9 | 595 | 562 | 177 | 206 | 1 | 1 | - | 1 | 2 | 1 | |
| Wis. W.N. CENTRAL | 32 | 22 | 78 719 | 90 789 | 12 132 | 237 222 | - | - | - | - | - | 10 | |
| Minn. | 17 | 14 | 28 | 68 | 11 | 18 | - | - | - | - | - | 1 | |
| lowa Mo. | 1 9 | 2 3 | 339 280 | 100 444 | 20 79 | 15 166 | - | - | - | - | - | 1 | |
| N. Dak. S. Dak. | - | 2 | 2 8 | 9 12 | 2 1 | 1 | - | - | - | - | - | - 8 | |
| Nebr. | - 5 | 1 | 13 49 | 22 134 | 6 13 | 8 14 | - | - | - | - | - | - | |
| Kans. S. ATLANTIC | 97 | 86 | 49 697 | 586 | 424 | 14 424 | - | - 1 | - | - 5 | 6 | 2 | |
| Del. | - | - | 2 | 11 | - | 3 | - | - | - | 1 | 1 | - 1 | |
| Md. D.C. | 28 | 35 - | 147 25 | 98 13 | 62 6 | 64 18 | - | - | - | 1 - | 1 - | 1 | |
| Va. W. Va. | 12 3 | 6 3 | 115 1 | 73 5 | 45 3 | 46 6 | - | - | - | 2 | 2 | - | |
| N.C. | 12 | 14 | 41 | 90 | 82 | 93 | - | - | - | - | - | - | |
| S.C. Ga. | 3 18 | 3 17 | 13 116 | 55 117 | 1 61 | 42 47 | - | - | - | 1 | 1 | - | |
| Fla. | 21 | 8 | 237 | 124 | 164 | 105 | - | 1 | - | - | 1 | - | |
| E.S. CENTRAL Ky. | 27 4 | 33 4 | 158 8 | 287 34 | 171 20 | 275 16 | - | - | - | - | - | 1 - | |
| Tenn. Ala. | 17 6 | 20 7 | 112 38 | 169 45 | 125 26 | 175 30 | - | - | - | - | - | - 1 | |
| Miss. | - | 2 | - | 39 | | 54 | - | - | - | - | - | - | |
| W.S. CENTRAL Ark. | 26 | 21 1 | 1,439 24 | 2,319 111 | 429 23 | 424 26 | - | - | - | - | - | 4 | |
| La. | 12 | 4 | 14 | 84 | 12 | 45 | - | - | - | - | - | - | |
| Okla. Tex. | 12 2 | 14 2 | 236 1,165 | 689 1,435 | 28 366 | 12 341 | - | - | - | - | - | 4 | |
| MOUNTAIN | 62 | 51 | 1,382 | 1,680 | 333 | 358 | - | - | - | - | - | 3 | |
| Mont. Idaho | - | 1 | 38 104 | 46 73 18 | 3 17 | 5 12 12 | - | - | - | - | - | - | |
| Wyo. Colo. | - 12 | 1 9 | 20 105 | 18 190 | 2 41 | 12 71 | - | - | - | - | - | - | |
| N. Mex. | 4 | 3 | 73 | 115 | 129 | 126 | - | - | - | - | - | - | |
| Ariz. Utah | 36 4 | 13 3 | 891 90 | 786 303 | 92 28 | 74 38 | - | - | - | - | - | 2 | |
| Nev. | 6 | 21 | 61 | 149 | 21 | 20 | U | - | U | - | - | 1 | |
| PACIFIC Wash. | 55 3 | 112 1 | 2,215 389 | 3,217 220 | 664 49 | 726 27 | - | 2 | - | 1 - | 3 - | 11 - | |
| Oreg. Calif. | 27 22 | 21 86 | 167 1,628 | 165 2,752 | 51 553 | 47 636 | - | 2 | - | - 1 | 3 | 8 | |
| Alaska Hawaii | 1 2 | 1 3 | 11 20 | 17 63 | 6 5 | 10 6 | - | - | - | - | - | 3 | |
| Guam | - | - - | - | - | - | 3 | U | - | - U | - | - | - - | |
| P.R. | 2 | - | 16 | 159 | 227 | 555 | - | - | - | - | - | - | |
| V.I. Amer. Samoa | - | - | - | - | - | - | Ü | - | Ū | - | - | - | |
| C.N.M.I. | - | 5 | - | 1 | 7 | 21 | U | - | U | - | - | 1 | |

N: Not notifiable

U: Unavailable

^{-:} no reported cases

 $^{^{*}}$ Of 111 cases among children aged <5 years, serotype was reported for 60 and of those, 27 were type b.

[†]For imported measles, cases include only those resulting from importation from other countries.

TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending May 30, 1998, and May 24, 1997 (21st Week)

| | Mening Dise | ococcal ease | | Mumps | | 2130 11 | Pertussis | | Rubella | | | |
|---------------------------|----------------|-----------------|--------|--------------|--------------|---------|--------------|--------------|---------|--------------|--------------|--|
| Reporting Area | Cum. 1998 | Cum. 1997 | 1998 | Cum. 1998 | Cum. 1997 | 1998 | Cum. 1998 | Cum. 1997 | 1998 | Cum. 1998 | Cum. 1997 | |
| UNITED STATES | 1,222 | 1,700 | 7 | 194 | 286 | 62 | 1,533 | 2,170 | 6 | 209 | 38 | |
| NEW ENGLAND | 66 | 105 | - | - | 7 | 4 | 265 | 489 | - | 32 | - | |
| Maine N.H. | 4 4 | 8 11 | - | - | - | - | 5 19 | 6 58 | - | - | - | |
| Vt. | 1 | 2 | - | - | - | - | 24 | 161 | - | - | - | |
| Mass. R.I. | 31 3 | 58 7 | - | - | 2 4 | 1 3 | 208 3 | 244 12 | - | 6 | - | |
| Conn. | 23 | 19 | - | - | 1 | - | 6 | 8 | - | 26 | - | |
| MID. ATLANTIC | 124 | 171 | - | 10 | 30 | 11 | 178 | 181 | 5 | 98 | 13 | |
| Upstate N.Y. N.Y. City | 31 13 | 40 30 | - | 3 4 | 4 1 | 11 - | 112 4 | 62 44 | 5 - | 94 2 | 2 11 | |
| N.J. Pa. | 35 45 | 32 69 | - | 3 | 5 20 | - | 5 57 | 11 64 | - | 2 | - | |
| E.N. CENTRAL | 169 | 247 | | 33 | 34 | 4 | 155 | 208 | _ | | 3 | |
| Ohio | 71 | 94 | - | 16 | 12 | 1 | 62 | 63 | - | - | - | |
| Ind. III. | 25 33 | 30 76 | - | 2 1 | 4 8 | 3 | 45 10 | 22 27 | - | - | - | |
| Mich. | 22 | 23 | - | 14 | 9 | - | 21 | 28 | - | - | - | |
| Wis. | 18 | 24 | - | - | 1 | - | 17 | 68 | - | - | 3 | |
| W.N. CENTRAL Minn. | 101 16 | 123 17 | 1 - | 19 10 | 8 3 | 5 2 | 130 78 | 117 69 | - | 3 | - | |
| lowa | 15 41 | 24 60 | - 1 | 5 3 | 4 | 1 | 27 | 7 21 | - | 2 | - | |
| Mo. N. Dak. | - | 1 | - | 1 | - | 2 | 11 - | 2 | - | - | - | |
| S. Dak. Nebr. | 6 4 | 4 4 | - | - | - 1 | - | 4 4 | 1 2 | - | - | - | |
| Kans. | 19 | 13 | - | - | - | - | 6 | 15 | - | 1 | - | |
| S. ATLANTIC | 214 | 283 | - | 30 | 34 | 8 | 108 | 173 | - | 4 | 2 | |
| Del. Md. | 1 20 | 4 31 | - | - | 1 | 1 - | 1 19 | 70 | - | - | - | |
| D.C. | - | 5 | - | - | - | - | 1 | 2 | - | - | - | |
| Va. W. Va. | 20 5 | 27 10 | - | 4 | 4 | - | 6 1 | 19 3 | - | - | 1 - | |
| N.C. S.C. | 29 32 | 49 36 | - | 7 4 | 6 9 | - 1 | 42 13 | 35 9 | - | 3 | - 1 | |
| Ga. | 40 | 52 | - | 1 | 5 | 1 | 2 | 6 | - | - | - | |
| Fla. | 67 | 69 | - | 14 | 9 | 5 | 23 | 29 | - | 1 | - | |
| E.S. CENTRAL Ky. | 88 13 | 120 31 | - | - | 16 2 | - | 43 17 | 40 10 | - | - | - | |
| Tenn. | 36 | 37 | - | - | 3 | - | 14 | 12 | - | - | - | |
| Ala. Miss. | 39 | 33 19 | - | - | 5 6 | - | 12 | 11 7 | - | - | - | |
| W.S. CENTRAL | 131 | 156 | 4 | 29 | 34 | 2 | 91 | 53 | 1 | 56 | 3 | |
| Ark. La. | 17 25 | 23 30 | - | 2 | - 7 | - | 12 | 3 7 | - | - | - | |
| Okla. | 23 | 21 | - | - | - | - | 13 | 8 | - | _= | - | |
| Tex. | 66 | 82 | 4 | 27 | 27 | 2 | 66 | 35 | 1 | 56 | 3 | |
| MOUNTAIN Mont. | 76 2 | 108 7 | 1 - | 17 - | 36 | 19 - | 361 1 | 578 5 | - | 5 - | 2 | |
| Idaho Wyo. | 3 3 | 7 | - | 1 1 | 2 1 | 4 | 165 7 | 385 4 | - | - | - | |
| Colo. | 17 | 31 | 1 | 3 | 3 | 1 | 54 | 138 | - | - | - | |
| N. Mex. Ariz. | 12 28 | 18 23 | N - | N 4 | N 22 | 14 | 56 57 | 25 10 | - | 1 1 | 2 | |
| Utah | 8 | 11 | - | 3 | 4 | - | 14 | 3 | - | 2 | - | |
| Nev. | 3 | 11 | U | 5 | 4 | U | 7 | 8 | U | 1 | - | |
| PACIFIC Wash. | 253 31 | 387 48 | 1 - | 56 5 | 87 10 | 9 8 | 202 123 | 331 154 | - | 11 8 | 15 2 | |
| Oreg. | 48 | 82 | N | N | N | 1 | 13 | 22 | - | - | - | |
| Calif. Alaska | 169 1 | 254 1 | 1 - | 37 2 | 62 5 | - | 62 - | 146 2 | - | 2 | 7 - | |
| Hawaii | 4 | 2 | - | 12 | 10 | - | 4 | 7 | - | 1 | 6 | |
| Guam P.R. | 2 | 1 9 | U - | 2 | 1 4 | U - | 2 | - | U - | - | - | |
| V.I. | - | - | - | - | - | - | - | - | - | - | - | |
| Amer. Samoa C.N.M.I. | - | - | U U | - | 1 | U | - | - | U U | - | - | |

C.N.M.I.
N: Not notifiable

U: Unavailable

-: no reported cases

TABLE IV. Deaths in 122 U.S. cities,* week ending May 30, 1998 (21st Week)

| | - | All Cau | ises, By | / Age (Y | ears) | | P&I [†] | | | All Cau | ises, By | Age (Y | ears) | | pout |
|--|---|---|---|--|---|---|---|--|---|---|--|---|--|--|---|
| Reporting Area | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 | Total | Reporting Area | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 | P&I [†] Total |
| NEW ENGLAND Boston, Mass. Bridgeport, Conn. Cambridge, Mass. Fall River, Mass. Hartford, Conn. Lowell, Mass. Lynn, Mass. New Bedford, Mass. New Bedford, Mass. New Haven, Conn. Providence, R.I. Somerville, Mass. Springfield, Mass. Waterbury, Conn. | | 372 99 U 10 20 31 22 8 15 25 51 1 26 18 | 23 U 4 3 12 3 1 3 7 7 2 5 | 37 14 U - 3 1 2 1 1 - 6 | 8 4 U - - - 1 1 1 - | 8 5 U - - - - 1 | 26 7 U 1 3 1 4 | S. ATLANTIC Atlanta, Ga. Baltimore, Md. Charlotte, N.C. Jacksonville, Fla. Miami, Fla. Norfolk, Va. Richmond, Va. Savannah, Ga. St. Petersburg, Fla. Tampa, Fla. Washington, D.C. Wilmington, Del. | 1,074 104 160 111 116 U 42 60 59 53 149 214 6 | 704 64 95 81 72 U 25 42 35 40 107 140 3 | 220 25 38 21 24 U 9 8 20 6 25 44 | 101 8 17 6 12 U 7 5 3 7 13 20 3 | 30 5 6 2 6 U | 19 2 4 1 2 U 1 3 1 - | 65 5 19 2 U 2 3 4 3 18 9 |
| Waterbury, Colini. Worcester, Mass. MID. ATLANTIC Albany, N.Y. Allentown, Pa. Buffalo, N.Y. Camden, N.J. Erie, Pa. Jersey City, N.J. New York City, N.Y. Newark, N.J. Paterson, N.J. Philadelphia, Pa. Pittsburgh, Pa. Reading, Pa. Rochester, N.Y. Schenectady, N.Y. Scranton, Pa. Syracuse, N.Y. Trenton, N.J. Utica, N.Y. Yonkers, N.Y. | 62 2,201 41 24 67 18 22 51 38 | 1,521 1,521 18 54 112 15 38 23 7599 26 16 278 21 27 80 U 22 60 19 10 | 9 459 9 2 10 2 6 12 9 235 16 81 12 6 24 U 3 16 3 16 3 | 5 154 2 4 1 2 1 6 87 3 2 27 27 2 4 7 U | 39 2 1 1 1 7 2 2 8 1 3 U | 1 288 1 1 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 95 2 1 6 1 3 3 3 26 4 1 6 0 2 8 | E.S. CENTRAL Birmingham, Ala. Chattanooga, Tenn. Knoxville, Tenn. Lexington, Ky. Memphis, Tenn. Mobile, Ala. Montgomery, Ala. Nashville, Tenn. W.S. CENTRAL Austin, Tex. Baton Rouge, La. Corpus Christi, Tex. Dallas, Tex. El Paso, Tex. Ft. Worth, Tex. Houston, Tex. Little Rock, Ark. New Orleans, La. San Antonio, Tex. Shreveport, La. Tulsa, Okla. | 82 66 161 118 40 130 1,150 55 31 | 509 83 38 50 41 101 82 31 83 733 34 22 300 85 47 72 185 41 20 114 83 | 167 33 14 20 12 36 15 7 30 259 12 5 11 43 11 20 81 14 12 34 U | 63 12 8 9 11 13 10 83 8 4 1 1 16 4 1 2 3 4 6 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 25 5 4 5 32 6 39 1 1 1 1 1 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | 20 2 4 8 5 1 36 2 10 4 5 6 1 2 6 0 U | 52 4 3 10 6 11 1 2 15 67 2 - 3 4 4 10 21 3 - 11 10 11 11 10 11 11 10 10 10 10 10 10 1 |
| E.N. CENTRAL Akron, Ohio Canton, Ohio Canton, Ohio Chicago, III. Cincinnati, Ohio Cleveland, Ohio Dayton, Ohio Dayton, Ohio Detroit, Mich. Evansville, Ind. Fort Wayne, Ind. Gary, Ind. Gary, Ind. Grand Rapids, Micl Indianapolis, Ind. Lansing, Mich. Milwaukee, Wis. Peoria, III. Rockford, III. South Bend, Ind. Toledo, Ohio Voungstown, Ohio W.N. CENTRAL Des Moines, Iowa Duluth, Minn. Kansas City, Kans. Kansas City, Kans. Kansas City, Mo. Lincoln, Nebr. Minneapolis, Minn. Omaha, Nebr. St. Louis, Mo. St. Paul, Minn. Wichita, Kans. | 166 63 102 42 49 30 70 54 591 50 26 18 85 | 1,205 36 25 217 64 70 84 47 123 18 44 39 102 47 74 34 21 53 41 420 41 21 54 68 62 60 55 54 | 6 5 104 17 24 20 18 38 7 8 1 9 39 39 10 15 6 8 7 7 4 4 4 14 4 7 8 8 14 14 14 4 14 15 16 16 16 17 17 18 18 18 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19 | 141 2 1 42 5 7 31 1 4 1 3 1 2 2 2 2 4 6 2 1 - - - - - - - - - - - - - - - - - - | 48 2 - 13 2 1 4 1 8 1 3 3 7 - 1 1 2 - 1 1 1 7 2 2 3 8 1 1 | 59 2 1 1 18 4 4 2 2 9 9 1 6 3 3 1 1 | 90 | MOUNTAIN Albuquerque, N.M. Boise, Idaho Colo. Springs, Colo Denver, Colo. Las Vegas, Nev. Ogden, Utah Phoenix, Ariz. Pueblo, Colo. Salt Lake City, Utah Tucson, Ariz. PACIFIC Berkeley, Calif. Fresno, Calif. Glendale, Calif. Honolulu, Hawaii Long Beach, Calif. Los Angeles, Calif. Portland, Oreg. Sacramento, Calif. San Diego, Calif. San Jose, Calif. San Jose, Calif. Santa Cruz, Calif. Seattle, Wash. Spokane, Wash. Tacoma, Wash. | 75 168 32 150 31 61 141 833 12 116 U U U U 108 108 98 33 98 46 79 | 558 56 28 38 40 111 23 94 21 41 106 596 9 82 U U U U 72 77 76 22 267 31 58 6,618 | 147 17 8 19 34 7 30 9 9 14 140 3 19 U U U U U U U U U U 17 11 6 17 6 14 14 13 19 19 17 11 6 17 16 17 16 17 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19 | 69 7 3 2 10 15 2 11 1 4 14 6 1 8 0 2 3 0 0 0 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 24 4 1 1 4 - 4 5 22 - 5 0 0 0 0 0 0 1 1 4 3 1 1 2 0 1 1 1 2 0 1 1 1 1 2 0 1 1 1 2 1 2 | 26 - 1 5 4 4 - 2 11 1 - 2 2 U U U U U 1 1 3 3 3 1 1 - 3 3 - 2 2 2 4 | 44 3 10 4 11 12 2 4 4 4 5 3 3 6 0 4 7 7 0 0 0 1 0 1 1 3 3 5 3 5 3 5 3 5 3 5 3 5 3 5 3 5 3 |

U: Unavailable -: no reported cases

*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

†Pneumonia and influenza.

Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

Total includes unknown ages.

Contributors to the Production of the MMWR (Weekly)

Weekly Notifiable Disease Morbidity Data and 122 Cities Mortality Data

Samuel L. Groseclose, D.V.M., M.P.H.

State Support Team

Robert Fagan Karl A. Brendel Harry Holden Gerald Jones Felicia Perry Carol A. Worsham **CDC Operations Team**

Carol M. Knowles Deborah A. Adams Willie J. Anderson Patsy A. Hall

Myra A. Montalbano Angela Trosclair, M.S. The Morbidity and Mortality Weekly Report (MMWR) Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format and on a paid subscription basis for paper copy. To receive an electronic copy on Friday of each week, send an e-mail message to listserv@listserv.cdc.gov. The body content should read SUBscribe mmwr-toc. Electronic copy also is available from CDC's World-Wide Web server at http://www.cdc.gov/ or from CDC's file transfer protocol server at ftp.cdc.gov. To subscribe for paper copy, contact Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone (202) 512-1800.

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Acting Director, Centers for Disease Control and Prevention Claire V. Broome, M.D.

Acting Deputy Director, Centers for Disease Control and Prevention Stephen B. Thacker, M.D., M.Sc.

Acting Director,
Epidemiology Program Office
Barbara R. Holloway, M.P.H.
Acting Editor, MMWR Series
Andrew G. Dean, M.D., M.P.H.
Managing Editor, MMWR (weekly)
Karen L. Foster, M.A.

Writers-Editors, MMWR (weekly)
David C. Johnson
Teresa F. Rutledge
Caran R. Wilbanks
Desktop Publishing and
Graphics Support
Morie M. Higgins
Peter M. Jenkins

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